Second Garden Creek TMDL Meeting Agenda

- Welcome and Introductions — Joey O'Quinn — VA DMME
- General TMDL Discussion — Allen Newman — VA DEQ
- Garden Creek TMDL — Rod Bodkin — Map Tech
  Dr. Jim Mudge — CEC
- Questions and Concerns

DEQ

Virginia Department of Mines Minerals and Energy

SECOND PUBLIC MEETING

FOR THE

Garden Cr.

Bacteria and Benthic TMDL Development

Allen Newman, PE
DEQ- Southwest Regional Office

Overview

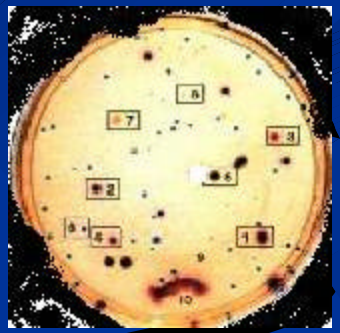
- Department of Environmental Quality
  1. Conducts Water Sampling
  2. Assess the data by comparing it to standards
  3. Problem (**Impaired**) waters are listed In an EPA report called the 303(d) Total Maximum Daily Load (TMDL) List

TMDL required by State and Federal Law

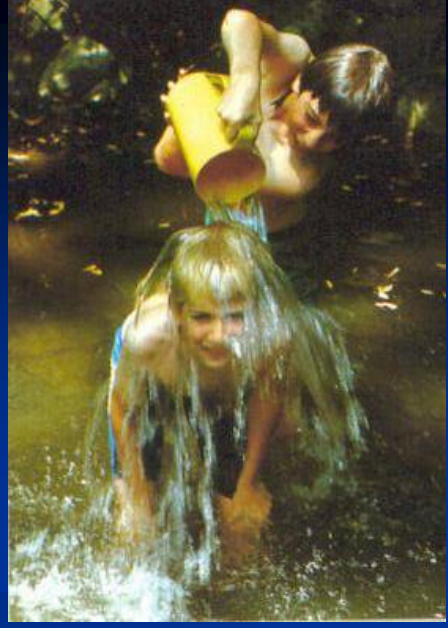
Garden Creek

- Two impairments
  - Aquatic Life (benthic)

  - Recreational (bacterial)



Designated Uses



Recreation *(swimming and boating)*

Aquatic Life

balanced, indigenous including game fish

Trout Waters

Wildlife

Edible natural resources

Fish

Shellfish (on the coast)

Water Quality Standards

Garden Creek Not Supporting <u>Aquatic Life Use</u> or <u>Recreation Use</u>

- **General Standard** (Benthic) (9 VAC 25-260-20):

  "the propagation and growth of a balanced, indigenous population of aquatic life"

  "All state waters shall be free from substances…which are harmful to human, animal, plant, or <u>aquatic life</u>."

- **Bacteria Standard** (9 VAC 25-260-170) " E. Coli no more than 235 bacteria per 100 ml

What is a **TMDL** or Total Maximum Daily Load?

- **Amount of a pollutant that a waterbody can receive and still meet water quality standards**
- It is pollutant specific
  - Aquatic Life Stressors
  - Bacteria
- It is a process to restore impaired waters
- A special study that:
  - Identifies all significant pollution sources,
  - Calculates amount of pollution from each source, and
  - Calculates pollution reductions, by source, needed to attain water quality standards.

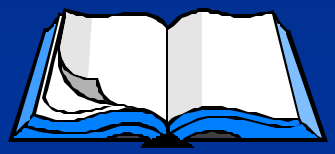
Where are We Now?

- First public meeting on Nov 9
  - Present information about impairments, watershed land uses and discharges, and solicit public comment
- Second meeting
  - Provide final draft of the report which list details of reductions needed
  - Seek Public Comment
  - Where do we spend money first

What Next?

Total Maximum Daily Load

Implementation Plan



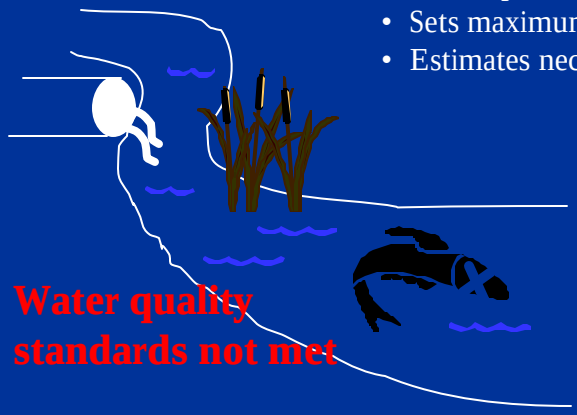
We Are Here

- Identifies permit controls, best management practices, or remediation options needed to make necessary pollutant reductions

Implementation

Polluted

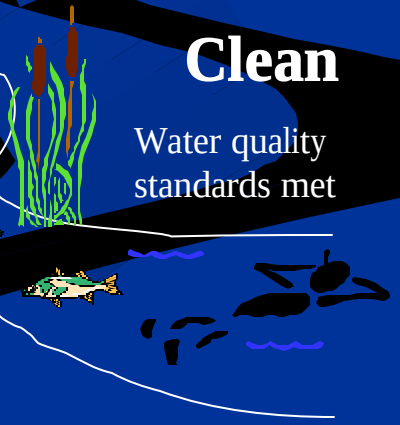
- Calculates amounts from each source
- Tracks pollutants in the system
- Sets maximum pollutant load
- Estimates necessary pollutant reductions



Water quality standards not met

Clean

Water quality standards met



The Process

What are the Steps in the TMDL Process?

1. Public notice for TMDL development
2. TMDL Study with Public Meeting - Monitoring and Modeling the Watershed
3. Public notice for Draft TMDL
   - Public Meeting with 30-day comment period
4. Submit to EPA for approval
5. State Water Control Board adoption of TMDL
6. TMDL Implementation Plan
7. Implementation of Corrective Actions Prescribed by Implementation Plan
8. Further Monitoring to Measure Success

Activities Since the Nov 9 Meeting

1. TMDL Modeling
2. Meeting with the County—Straight pipes
3. Interest from Pharmacy and Law Schools
4. Interest from public and Big Sandy Watershed Collation
5. VDH—initiatives on straight pipes and failing septic tanks


LEVISA FORK
TMDL STUDY
N
Big Prater Creek - E.Coli
Bull Creek & Tributaries - Benthic
Dismal Creek - E.Coli/Temp.
Garden Creek - PCB/Fecal/Chloride/Benthic
Levisa Fork - PCB/Fecal/Chloride/Benthic
Slate Creek - Benthic/Fecal
River/Stream
County Boundary
Watershed Boundary
BUCHANAN
TAZEWELL
BS15
BS14
BS14
BS13
BS11
BS10
BS12
BS09
BS08
FPM
FPM
Monitoring Station
A - Ambient
B - Benthic
C - Sediment/Fish Tissue
FPM - Freshwater Probmon
SS - Special Study

Information

- **TMDL**
  - **Virginia**
    - **DEQ homepage -** http://www.deq.virginia.gov/tmdl
    - **presentations http://www.deq.virginia.gov/tmdl/mtgppt.html**
    - **draft reports http://gisweb.deq.virginia.gov/tmdlapp/tmdl_draft_reports.cfm.**
  - **Federal**
    - **EPA homepage -** http://www.epa.gov/owow/tmdl/

Comment Period

- **Ends May 16th**
  - **Virginia Register publication on April 16th**
    - **DEQ homepage -** http://www.deq.virginia.gov/tmdl
    - **presentations**
      http://www.deq.virginia.gov/tmdl/mtgppt.html
    - **draft report on the web by April 16**

      http://gisweb.deq.virginia.gov/tmdlapp/tmdl_draft_reports.cfm

Thank You !

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